



Blue Laser Diode

NDB7B77

■Features

- Multi Transverse Mode
- Can Type: ϕ 9.0 mm Floating Mounted with Protection device

■Absolute Maximum Ratings

Item	Symbol	Absolute Maximum Ratings	Unit
Forward Current (Tc=25°C)	If	2.2	A
Allowable Reverse Current (Tc=25°C)	Ir (LD)	85	mA
Storage Temperature	Tstg	-10~85	°C
Operating Case Temperature	Tc	0~70	°C

■Initial Electrical/Optical Characteristics (Tc=25°C)

Item	Condition	Symbol	Min	Typ.	Max	Unit
Optical Output Power	If=2.0A	Po	-	(2.3)	-	W
Dominant Wavelength	If=2.0A	λ_d	440	-	455	nm
Threshold Current	CW	I _{th}	150	-	350	mA
Slope Efficiency	CW	η	1.0	-	2.2	W/A
Operating Voltage	If=2.0A	V _{op}	3.7	-	5.2	V
Beam Divergence*	Parallel	If=2.0A	$\theta_{//}$	5	(14)	°
	Perpendicular	If=2.0A	θ_{\perp}	35	(45)	°

() are reference figures.

* Full angle at 1/e² from peak intensity

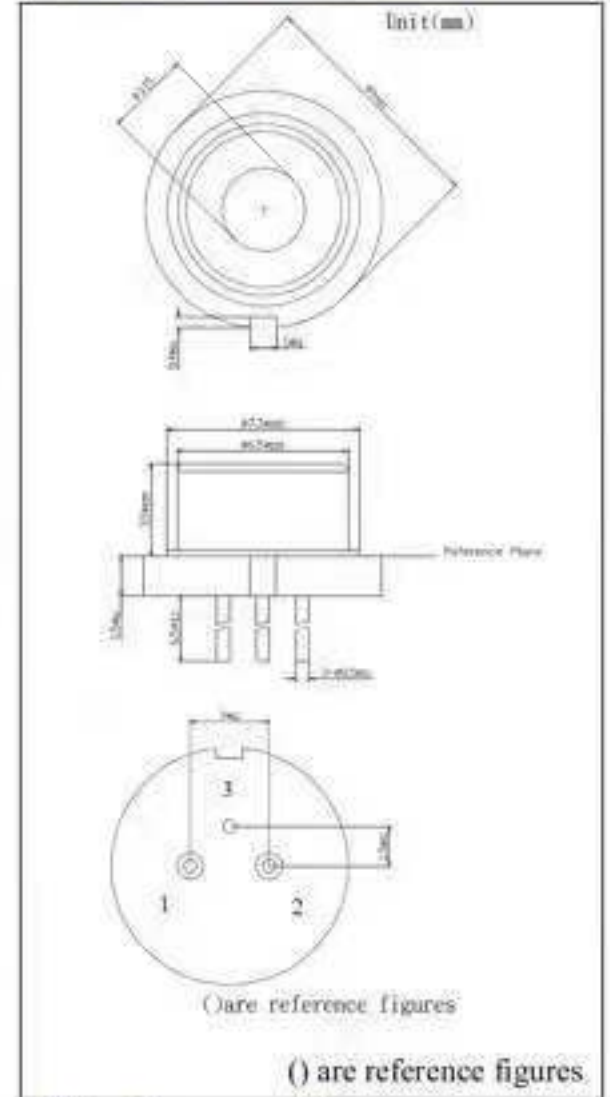
All figures in this specification are measured by Nichia's method and may contain measurement deviations.

The above specifications are for reference purpose only and subjected to change without prior notice.

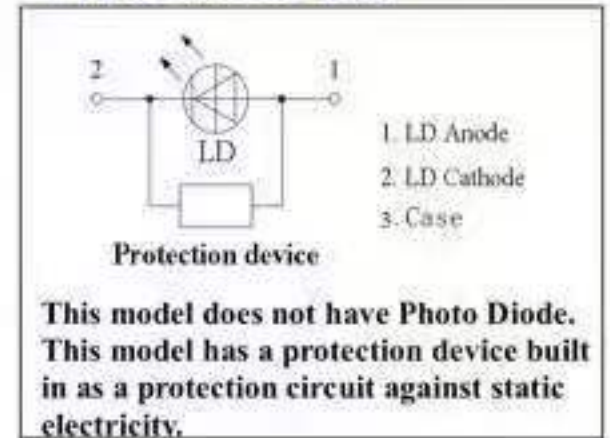
Safety of Laser light

- **Laser Light can damage the human eyes and skin.** Do not expose the eye or skin to any laser light directly and/or through optical lens. When handling the LDs, wear appropriate safety glasses to prevent laser light, even any reflections from entering to the eye. Focused laser beam through optical instruments will increase the chance of eye hazard.
- These LDs are classified in **Class 4 of IEC60825-1 and 21 CFR Part 1040.10 Safety Standards.** It is absolutely necessary to take overall safety measures against User's modules, equipment and systems into which Nichia LDs are incorporated and/or integrated.

Outline Dimension



Pin Connection



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